



THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

APO-1 (NEMA GPO-1)

Item:	NEMA Grade GPO-1 (APO-1 from The Gund Company)		
Description:	APO-1 from The Gund Company is a unique blend of standard NEMA GPO-1. This grade of low-pressure laminate is made from fiberglass mat reinforced, polyester composite.		
Standards:	NEMA LI-1: GPO-1 • IEC 60893: UPGM 201		
Availability:	Laminate Sheets:	English Units (in)	SI Units (mm/cm)
		Thickness:	0.031 - 2.0
	Sheet Size:	36 x 72 / 48 x 96	91 x 182 / 121 x 244 (cm)
Fabricated Parts:	The Gund Company custom fabricates insulation materials to the exact specifications and drawings specified by our customers.		

Key Characteristics	Test Method	Units - English (SI)	NEMA Standard	Typical Values
Standard Color	--	--	--	Brown
Density	--	lb/in ³ (g/cc)	N/A	0.066 (1.83)
Water Absorption (1/8" thick)	ASTM D-570	%	0.7	0.25
Tensile Strength	ASTM D-638	psi (MPa)	8,000	9,500 (66)
Compressive Strength, Flatwise	ASTM D-695	psi (MPa)	30,000	33,000 (227)
Flexural Strength	ASTM D-790	psi (MPa)	18,000	20,000 (138)
Shear Strength	ASTM D-732	psi (MPa)	N/A	13,000 (89)
Bond Strength	ASTM D-229(A)	lbs (kg)	850	1,200
Thermal Class	--	--	--	Class B (130°C)
Flammability	UL 94	--	HB	HB
IZOD Impact Strength, Edgewise	ASTM D-256	ft-lbs/in	8	8.5
Arc Resistance	ASTM D-495	Seconds	100	180
Dielectric Strength (1/16" Perpendicular in oil)	ASTM D-149 (A-short)	V/mil (kV/mm)	300	450 (17.6)
Breakdown Voltage (Parallel Pin, in oil)	ASTM D-149 (A-stopped)	kV	40	> 40
UL File Number	--	--	--	E323105

Data supplied above are typical values and are not to be considered specification values. All of the information, suggestions and recommendations pertaining to the properties and uses of the products herein are based upon tests and data believed to be accurate; however, the final determination regarding suitability of any material described herein for the contemplated application, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty, expressed or implied, including, without limitation warranty of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.